

A Spacer for a Boost Unit

Abstract

A brake system having a boost unit secured to a dash panel that separates an engine compartment from a passenger compartment of a vehicle. A spacer located between a boot and the booster unit offsets the boost unit into the engine compartment. Air from the engine compartment is selectively communicated to a chamber within the boost unit in response to an input force applied to a control valve retained in a bore of a hub of a movable wall. The communication of air is along a flow path defined by the spacer, a cylindrical projection of the hub and the boot. The spacer is defined by a body having a front face and a rear face with a plurality of circular bearing surfaces located at an intersection of the sides of the body. Each circular bearing surface has an axial bore that extends from the front face to the rear face for receiving a mounting bolt that extends from the boost unit. A wall located between the front face and the rear face extends between the sides and has an axial opening with a flange that extends to a height that is parallel with the front face and a plurality of ribs that extend from the flange toward the sides to define a plurality

of radial slots. An axial slot in the spacer extend from the front face to the rear face while a peripheral slot connects the axial slot with the engine compartment. A base member of the boot engages the front face of the spacer while the accordion shaped body of the boot surrounds the cylindrical projection of the hub to define the flow path to the bore of the hub. A plurality of tabs located in an axial bore of at least one of the bearing surfaces are directed toward the axis of the axial bore and the front face such that on engaging a mounting stud of the boost unit the tabs radially flex outwardly to only thereafter allow the rear face of the spacer to be moved into engagement with the boost unit and thereby assure that the front face is always adjacent the base member of the boot in the establishment of the flow path.